Goal III Ensure Reliable, Affordable Electricity Generation

- 1. Reserve Margins
- 2. Utility Long-term Plans

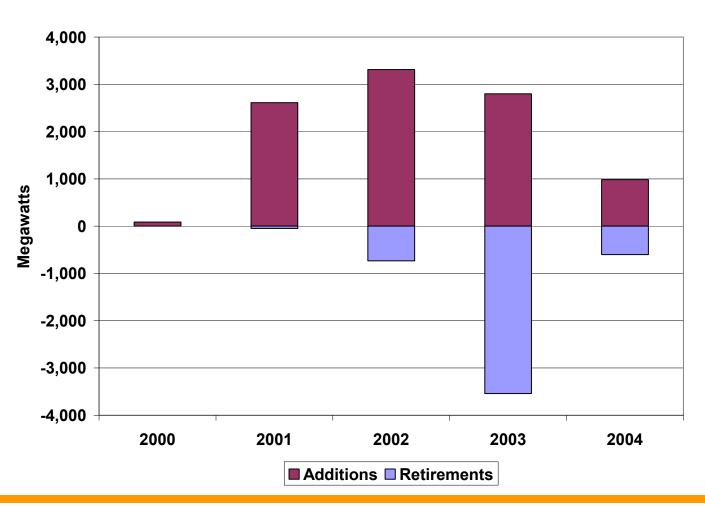
David Ashuckian California Energy Commission

Maryam Ebke
California Public Utilities Commission

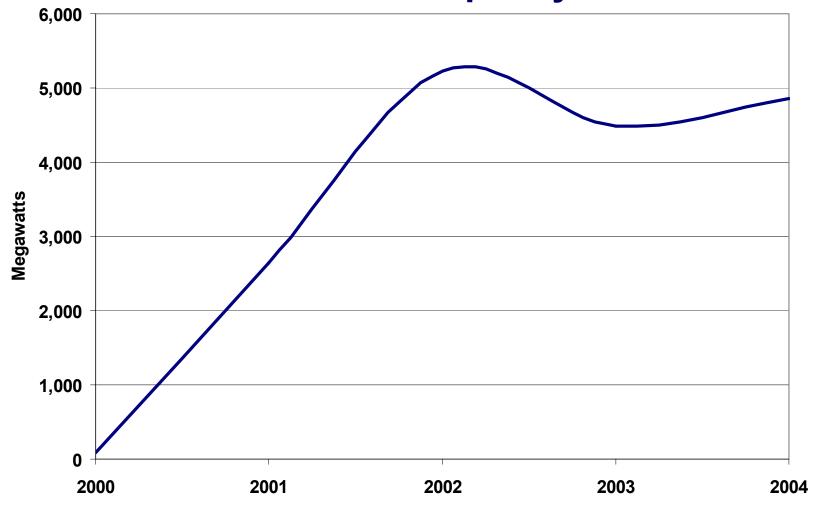
California's Electricity Demand and Supply Outlook

Updated September 7, 2004

Additions and Retirements



Cumulative Net Capacity Additions



June Forecast for Summer 2004

	CAISO	State		
Demand Forecast				
1-in-2	44,160	53,896		
1-in-10	46,902	57,247		
Supply	49,121	60,157		
Reserve				
1-in-2	12.7%	12.8%		
1-in-10	5.3%	5.6%		

Summer 2004 Statewide Peaks (to date)

	August 11	September 7
Demand	55,850	55,989
Supply	60,532	60,585
Reserve	9.4%*	8.2%*

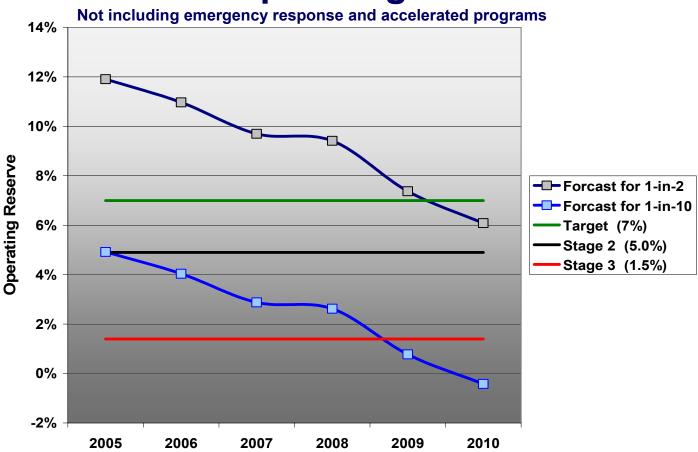
^{*} Estimated.

Statewide OutlookAdjusted to reflect 2004 economic growth*

Line		Aug 2005	Aug 2006	Aug 2007	Aug 2008	Aug 2009	Aug 2010
1	Existing Generation	56,862	58,590	59,025	59,552	60,473	60,678
2	Forced and Planned Outages	-3,750	-3,750	-3,750	-3,750	-3,750	-3,750
3	Retirements	-1,091	-2,385	0	-465	0	0
4	Net Firm Imports	4,948	5,048	4,848	4,848	4,315	4,209
5	High Probability CA Additions	2,819	2,820	527	1,386	205	198
6	Spot Market Imports	2,700	2,700	2,700	2,700	2,700	2,700
7	Total Supply (MW)	62,488	63,023	63,350	64,271	63,943	64,035
8	Emergency Response Programs/Interruptibles	1,102	1,102	1,102	1,102	1,102	1,102
9	Accelerated Programs	1,320	2,081	2,883	3,300	3,638	3,968
10	Interzonal Congestion						
11	1-in-2 Summer Temperature Demand (Normal)	56,365	57,292	58,178	59,158	59,847	60,605
12	Projected Operating Reserve (1-in-2)	11.9%	11.0%	9.7%	9.4%	7.4%	6.1%
13	With Emergency Responses	14.1%	13.1%	11.8%	11.4%	9.4%	8.0%
14	With Emerg. Resp. & Accelerated Programs	16.6%	17.1%	17.2%	17.5%	15.9%	15.1%
15	1-in-10 Summer Temperature Demand (Hot)	59,790	60,774	61,713	62,753	63,484	64,287
16	Projected Operating Reserve (1-in-10)	4.9%	4.0%	2.9%	2.6%	0.8%	-0.4%
17	With Emergency Responses	6.9%	6.0%	4.8%	4.5%	2.6%	1.4%
18	With Emerg. Resp. & Accelerated Programs	9.3%	9.7%	9.9%	10.2%	8.8%	8.0%

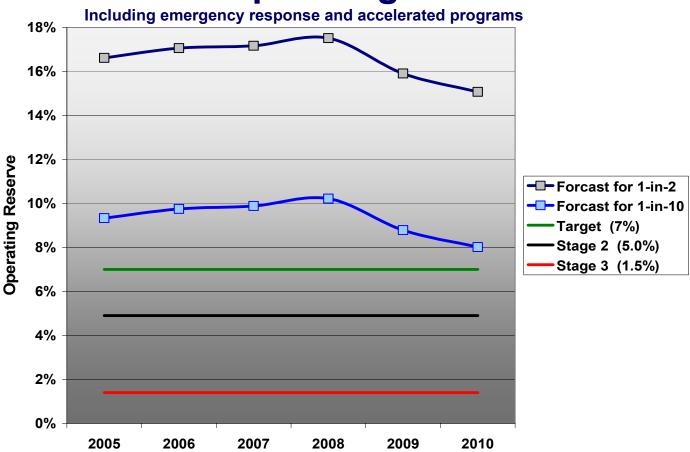
^{*}This is adjusted based on faster than expected 2004 economic growth. This Outlook does not replace CEC staff's previous Outlook. A new Demand Forecast will be completed for the 2005 Integrated Energy Policy Report and published in Spring 2005.

Statewide Operating Reserve*



^{*}This is adjusted to reflect faster than expected 2004 economic growth. This Outlook does not replace CEC staff's previous Outlook. A new Demand Forecast will be completed for the 2005 Integrated Energy Policy Report and published in Spring 2005.

Statewide Operating Reserve*



^{*}This is adjusted to reflect faster than expected 2004 economic growth. This Outlook does not replace CEC staff's previous Outlook. A new Demand Forecast will be completed for the 2005 Integrated Energy Policy Report and published in Spring 2005.

Under an Accelerated proceeding, the CPUC has taken a number of steps to implement two major goals:

- Review and adopt long-term procurement plans for the utilities.
- Adopt a comprehensive Resource Adequacy Requirement (RAR) program to ensure the state has adequate electricity resources to meet its energy needs.

These goals have received top priority in the CPUC's procurement proceeding.

California Energy Action Plan The CPUC has acted expeditiously to ensure utilities are prepared to meet their customers' electric demands.

- Adopted the utilities' short term procurement plans for 2004, which included allowing them to enter into multi-year contracts of up to 5 years to meet needs beginning in 2004.
- Established a long term procurement framework for the utilities.
 - ➤ Directed that all load serving entities meet a phased-in 15% to 17% planning reserve margin by January 1, 2008.
 - ➤ Granted procurement authority to allow utilities to continue procuring for the first three quarters of 2005.
 - Ordered the utilities to file long term plans biennially, beginning in 2004.

CPUC Actions Continued:

- Initiated a new procurement proceeding whose main purpose is to review and adopt long-term plans.
 - The new procurement proceeding is also intended to coordinate all efforts ongoing in other proceedings addressing important issues such as energy efficiency, demand response, distributed generation, transmission, renewables, QFs, and community choice aggregation.

Within the past year, the CPUC has approved over 2,100 MW of capacity from power plants.

- Approved Southern California Edison's 1,054 MW Mountain view Project.
- Approved contracts for two new large power plants near San Diego.
 - 550 MW Palomar plant, which will come online in 2006.
 - 570 MW Otay Mesa plant.

The CPUC continues to take steps to improve reliability in summer 2004 and beyond.

- In July 2004, the CPUC took quick action to address lack of deliverable resources in the SP 15 zone and to help the CAISO maintain reliable grid operations in summer of 2004.
- The CPUC modified past orders and procedures to address specific operating and reliability problems associated with scheduling and procurement practices in a specific area in Southern California.

Reliability actions continued:

- Through an expedited and emergency procedure, the CPUC adopted an order that directed the utilities to take local reliability into account in order to reduce short term transmission congestion costs and increasing local reliability.
- In July 2004, the CPUC approved several demand response programs for California utilities.
- In July and August 2004, the CPUC approved three major transmission upgrade projects (Mission-Miguel, Viejo System project, and Jefferson Martin) to increase delivery of reliable supply of electricity to California.

The CPUC has an aggressive schedule to adopt the utilities long-term plans by the end of 2004.

- The CPUC and the CEC staff are reviewing the utilities' long-term procurement plans.
- Hearings on long term plans are underway through September.
- CPUC plans to issue a proposed decision on long term plans under a very tight schedule in November 2004.

Review of utilities long-term plans continued:

- In their filings, IOUs followed the EAP loading order, though they tailored some of the specifics to meet their individual needs.
- December decision will focus on rules for transparent, competitive procurements and costrecovery for mid- and long-term resources procured in 2005 and 2006.
- Procurement rules will be consistent with resource adequacy and with local reliability/deliverability concerns.

The CPUC has essentially completed Phase 1 of resource adequacy and will proceed with phase 2.

- Held a series of eleven workshops to discuss technical issues related to resource adequacy.
- Issued a workshop report on resource adequacy and sought comments and replies from the parties to create a record for an initial decision on resource adequacy issues.
- In addition, consistent with the Governor's April 28, 2004 letter to President Peevey, parties were invited to comment on accelerating the implementation of the reserve margin from January 1, 2008 to June 1, 2006.

Resource adequacy continued:

- An interim opinion on resource adequacy issues was issued on August 31, and will be on the CPUC's October 7, 2004 Agenda for final adoption.
 - ➤ It recognizes that the CPUC's RAR must work closely with the CAISO's requirements.
 - ➤ The Interim Order establishes initial resource adequacy requirements (such as the 15-17% planning reserve margin) for June 1, 2006 as the target date for full implementation, requires compliance filings, and establishes a phase 2 to consider the implementation topics.

Resource adequacy continued:

The CPUC plans to complete Phase 2 of its RAR efforts by mid-2005. The Primary objectives of Phase 2 are:

- Establishing implementation details for various Phase 1 policies adopted in the decision.
- Establishing reporting requirements, review processes, and compliance tools. Perhaps will result in a new General Order applicable to LSEs.
- In support of CAISO's proposal to conduct an analysis and develop a deliverability requirement, the CPUC will consider this issue in phase 2.